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LEE & HAYES PLLC  
421 W RIVERSIDE AVENUE SUITE 500  
SPOKANE, WA 99201

EXAMINER
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EL HADY, NABIL M

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2152

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/862,410

**Applicant(s)**

SHAO ET AL.

**Examiner**

Nabil M. El-Hady

**Art Unit**

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. <u>1/8/2006</u> .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____.  | 6) <input type="checkbox"/> Other: _____.                                   |

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/2004 has been entered.

2. Claims 1-32 are pending in this application.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6-11 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 6-11 fail to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed 3/4/2005 and 8/9/2005. In the reply of 3/4/2005, applicant has added to the original claim a limitation for implementing rate control by amending claim 6 with "implementing rate control based on minimizing quality degradation responsive to a video quality weighing factor, a packet loss rate, and respective bit rates of respective service classes", as well as making the selective outputting of the packets to be "responsive to the implemented rate control". In the reply of 8/8/2005, applicant has deleted these additions to the original claim. This act of adding

and then retrieving an essential limitation in claim 6 indicates that the invention is different from what is defined in the claim(s) and that the subject matter which applicant regards as his invention is not clearly and distinctly claimed.

6. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The following words or phrases are not clearly understood rendering corresponding claims vague and/or indefinite:

a) "belong to a single session", claim 1, line 8. It is unclear what "session" the claim is referring to, a session is usually defined as a communication period of time between an entity and an interactive system, no entity, interactive system, nor communication period of time is defined in the claim;

b) "within at least one network session", claim 5, line 5. Again as before, it is unclear what "session" the claim is referring to, a session is usually defined as a communication period of time between an entity and an interactive system, no entity, interactive system, nor communication period of time is defined in the claim;

c) "a user interaction", claim 6, lines 5-6. It is unclear how "a user" is related to the method claimed, and how "a user" is interacting with the process claimed, if such a user is in connection with the network, if such user is receiving the packetized content information, or if

such user is influencing the selective output of the packets as an administrator to the process or as a receiver to the packets;

d) "one prioritizing parameter associated with at least one remote device", claim 7, line 4.

It is unclear how this is related to "one or more prioritizing parameters associated with a user interaction", claim 6, lines 5-6, are they the same parameters, is the user interacting through the remote device, or the user and the remote device are different feeding different parameters;

e) "one prioritizing parameter associated with a monitored performance of the network", claim 8, line 4. It is unclear if the prioritizing parameter here is the same or related to the ones before, and if the performance is monitored by the "a user" as in claim 6, by "one remote device" as in claims 7, or by a third entity contributing to the prioritizing parameters;

f) "within a single session", claim 14, line 7. Again as before, it is unclear what "session" the claim is referring to, a session is usually defined as a communication period of time between an entity and an interactive system, no entity, interactive system, nor communication period of time is defined in the claim.

g) "a user interaction", claim 19, line 7, and "the user interaction", lines 10-11. It is unclear how "a user" is related to the apparatus claimed, and how "a user" is interacting with the apparatus claimed, if such "a user" is in connection with the claimed network, if such "a user" is receiving the packetized content information, or if such "a user" is influencing the output of resource coordination information as an administrator to the apparatus or as a final receiver to the packets of content information;

h) “collaborator logic ...the user interaction”, claim 19, lines 4-11. The collaborator logic receives two prioritizing parameters, the first is associated with application communicating the content information and the second is associated with a user interaction. The collaborator logic is operatively coupled with a packetizer logic from one side and a priority mapping logic from another side. First, it is unclear if the first prioritizing parameter is outputted with the packets of content information received from the packetizer logic. Second, it is also unclear if the second prioritizing parameter is received from a third entity in communication with the collaborator logic;

i) “one prioritizing parameter associated with at least one remote device”, claim 20, line 3. It is unclear how this is related to “one or more prioritizing parameters associated with a user interaction”, claim 19, line 7, are they the same parameters, is the user interacting through the remote device, or the user and the remote device are different and feeding different prioritizing parameters;

l) “one prioritizing parameter associated with the network performance”, claim 21, lines 4-5. It is unclear how this is related to “one or more prioritizing parameters associated with a user interaction”, claim 19, line 7, are they the same parameters, is the user interacting through the network monitoring logic, or the user and the network monitoring logic are different and feeding different prioritizing parameters;

m) “a second application-aware resource controller operatively configured within the second access network”, claim 25, lines 10-11. The use of the second application-aware resource controller is unclear, and if and how it will contribute to the single communication

session between the first host device and the second host device. Does this single communication session established/initiated by the first host, and does the second application-aware resource controller contribute to another single session initiated by the second host;

n) "selectively aggregate content information", claim 25, line 12. It is unclear what are the components of the content information that is aggregated, why the content information need to be aggregated, and on what basis the content information is being aggregated, in order to understand the meaning of "selectively";

o) "based on an identified network state", claim 26, line 3. It is unclear which network is referred to in the claim, the backbone network, the first access network, or the second access network;

p) "processing agent ... selectively filter content information", claim 30, lines 2-3. It is unclear how the processing agent is operatively performing within the network environment in relation to the application-aware resource controller, and it is configured to selectively filter the content information before it is being aggregated or to selectively filter the aggregated content information.

B. The following lacks antecedent basis:

a) "service class priority levels". claim 12, line 11;

b) "the at least one prioritizing parameter associated with the network", claim 21, lines 6-7 and lines 8-9;

c) "first device", claim 27, lines 3-4;

7. Claims 1-32 are rejected under 35 U.S.C. 102(e)/103(a) as being anticipated by /unpatentable over Aharoni et al. (US 6,014,694), hereafter "Aharoni ".

8. Aharoni is cited by the examiner in a previous office action.

9. As to claim 1, Aharoni discloses the invention as claimed including a method comprising; compressing video objects (col. 2, lines 15-16; 14, 16, Fig. 1; and 212, Fig. 15); generating at least one corresponding elementary stream comprising the compressed video objects (col. 2, lines 29-35; Fig. 4; and 214, Fig. 15 ); classifying information within each elementary stream based on importance (col. 2, lines 29-31; and col. 9, lines 57-62) and responsive to the compressed video objects (col. 9, lines 57-62); and assembling the classified information into packets associated with different classes of network packets (col. 2, lines 56-62; and col. 7, line 67 to col. 8, line 1) that belong to a single session (col. 19, lines 14-21).

10. Aharoni's disclosure talks about raw video and data objects in several places . However, Aharoni discloses that any suitable method of video compression can be utilized to process the raw video data such as described in connection with MPEG-1, MPEG-2, or MPEG-4 standards (col. 6, lines 56-59; and col. 18, lines 39-42). It is well known in the art that MPEG-4 standards are object-based (e.g. "MPEG4 Video Verification Model" reference is cited by the applicant in the parent application 09/464,671). This basically means that Aharoni's raw data are video objects and Aharoni's data objects are video objects.



11. As to claim 6, the claim is rejected for the same reasons as claim 1 above. In addition, Aharoni discloses a method comprising: packetizing content information (col. 7, lines 60-62); generating resource coordination information based at least in part on at least one prioritizing parameter associated with an application communicating the content information (col. 8, lines 2-23) and on one or more prioritizing parameters associated with a user interaction (col. 19, lines 14-21); selectively associating each packet of content information with a service class selected from among at least two different service classes based on the resource coordination information (col. 8, lines 2-23; and col. 9, lines 57-62); selectively outputting at least one packet of content information based on a priority associated with the service class associated with the packet of content information (col. 8, lines 2-23; and col. 9, lines 57-62); and providing the at least one packet of content information to a network (col. 8, lines 6-7).

12. As to claim 12, the claim is rejected for the same reasons as claim 6 above. In addition, a computer-readable media comprising computer instructions for performing acts comprising: generating prioritization information based at least in part on at least one parameter associated with an application streaming media information; associating packets of the media information with a service class selected from a plurality of different service classes based on the prioritization information; and selectively outputting some of the packets of media information based on their respective service class priority levels, is inherent in Aharoni's disclosure. Moreover, Aharoni discloses selectively discarding a portion of the packets of the media information in accordance with an adaptive rate control mechanism at a sending computing device (col. 3, lines 46-60; and col. 12, lines 42-55).

13. As to claim 14, the claim is rejected for the same reasons as claims 1 and 6 above. In addition, Aharoni discloses an apparatus comprising: logic configured to process content information output by an application layer process and provide resulting processed content information to a network layer process (inherent in the communication between 12, 14, 16, 18, and 20, Fig. 1), the logic implementing at least one protocol layer process configured to packetize the content information (col. 8, lines 2-7; col. 7, lines 39-42; and col. 8, lines 56-63), a queuing layer process configured to prioritize the packetized content information in accordance with different priorities within a single secession (col. 9, lines 56-62; col. 18, lines 61-65; and col. 19, lines 16-21), and a scheduling layer process configured to selectively provide the prioritized packetized content information to the network layer process based on at least one quality of service parameter (col. 8, lines 2-3, and 18-23).

14. As to claim 19, the claim is rejected for the same reasons as claims 1, 6, and 14 above. In addition, Aharoni discloses an apparatus comprising: packetizer logic configured to receive encoded content information and output corresponding packets of content information (col. 7, line 67 to col. 8, line 17; and Fig. 2); collaborator logic operatively coupled to the packetizer logic and configured to receive at least one prioritizing parameter associated with at least one application, including an application communicating the content information (18, Fig. 2 ) and one or more prioritizing parameters associated with a user interaction (col. 7, line 62 to col. 8, line 16; and col. 19, lines 15-21) and output resource coordination information associated based at least in part on the at least one prioritizing parameter associated with the application (col. 8, lines 2-23; and Fig. 2) ; priority mapping logic operatively coupled to the collaborator logic and configured to receive the packetized content information and the resource coordination information, and selectively associate each received packet of content information with a service

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class selected from among at least two different service classes based on the resource coordination information, and selectively output at least one packet of content information based on a priority associated with each service class (col. 8, lines 2-23; Fig. 2; and col. 9, lines 57-62) ; and forwarder logic operatively coupled to the priority mapping logic and configurable to provide the at least one packet of content information to a network (col. 8, lines 6-7; and Fig. 2).

15. As to claim 25, the claim is rejected for the same reasons as claims q, 6, 14, and 19 above. In addition, Aharoni discloses a system comprising: a network environment (Fig. 15) including a backbone network (218, Fig. 15), and a first access network (216, Fig. 15) and a second access network (220, Fig. 15; and col. 18, lines 15-16) each being operatively coupled to the backbone network; a plurality of host devices including a first host device operatively coupled to the first access network (218, Fig. 15) and a second host device operatively coupled to the second access network (220, Fig. 15); an application-aware resource controllers (222, Fig. 15).

16. Aharoni discloses one application-aware resource controller (222, Fig. 15) which function to determine and control the bandwidth for a particular network connection (col. 21, lines 34-36). It would have been obvious to one skilled in the art at the time of the invention to utilize a plurality of these application-aware resource controller in the system in order to cover more than network connections.

17. As to claim 2, Aharoni does not explicitly spell out the video data as shape, motion, and texture information. However, Aharoni discloses assigning different priority levels for multiple

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types of frames comprised of video data which may include shape, motion, and texture information (col. 9, lines 57-62).

18. As to claim 3, Aharoni does not explicitly disclose selectively multiplexing a plurality of the network packets with the same priority level into an application level packet. However, it would have been obvious to one skilled in the art at the time of the invention that a client would receive a subset of the levels chosen to have suitable data content to match that of the network connection or the client by multiplexing a prioritized video data stream comprising multiple levels (col. 2, lines 28-35).

19. As to claim 4, Aharoni does not explicitly disclose arranging the content of at least one of the network packets in an interleaving fashion. However, it is well known in the art, and would have been obvious to one skilled in the art at the time of the invention that arranging the contents of the packet in an interleaving fashion would speed up the packet assembly and would as a result enhance the fast transcoding process.

20. As to claim 5, Aharoni discloses the different classes of network packets are associated with a network that provides differentiated services (Diff- Serv) such that an adaptive transmission environment is implemented for multimedia communications using scalable coding technology using the differentiation capabilities within at least one network session (col. 2, lines 10-12,44-46; and col. 7, lines 35-42).

21. As to claim 7, Aharoni discloses generating the resource coordination information based at least in part on at least one prioritizing parameter associated with at least one remote device that is operatively coupled to the network (22, Fig. 1; and col. 8, lines 2-23).

22. As to claim 8, Aharoni discloses generating the resource coordination information based at least in part on at least one prioritizing parameter associated with a monitored performance of the network (col. 8, lines 2-23).

23. As to claims 9,10, 22, and 23, Aharoni discloses encoding initial content information as the encoded content information, and segmenting raw video data into a plurality of video objects and wherein at least one of the video objects is included in the initial content information (col. 2, lines 56-59; and col. 7, lines 49-51).

24. As to claims 11, 13, 18, 24, and 31, Aharoni discloses the content information includes data representing media information selected from a group comprising video information, audio information, image information, and textual information (col. 1, lines 12-17; and col. 2, lines 15-16).

25. As to claim 15, Aharoni discloses the queuing layer process is configured to provide a plurality of priority class queues arranged to queue the packetized content information (Fig. 15).

26. As to claim 16, Aharoni discloses an application-aware quality of service control layer process and a packet mapping layer process configured to operatively provide quality of

service differentiation of the content information within a flow of content information from the application layer process (col. 8, lines 2-23; Fig. 2; and col. 9, lines 57-62).

27. As to claim 17, Aharoni discloses the protocol layer process operatively includes at least one protocol selected from a group of protocols including TCP, UDP, and IP (col. 2, lines 10-15).

28. As to claim 20, Aharoni discloses the collaborator logic is further configurable to receive at least one prioritizing parameter associated with at least one remote device that is operatively coupled to the network (22, Fig. 1; and col. 8, lines 2-23), and output the resource coordination information based at least in part on the at least one prioritizing parameter associated with the remote device (col. 8, lines 2-23).

29. As to claim 21, Aharoni discloses network monitoring logic operatively coupled to the collaborator logic and configurable for use with the network and in monitoring network performance, and to output at least one prioritizing parameter associated with the network performance (col. 2, lines 56-63; and col. 13, lines 11-13), and the collaborator logic is further configured to receive the at least one prioritizing parameter associated with the network, and output the resource coordination information based at least in part on the at least one prioritizing parameter associated with the network (col. 8, lines 2-23; and Fig. 2).

30. As to claim 26, Aharoni discloses at least the first application-aware resource controller is configured to selectively adapt a flow rate associated with the content information based on an identified network state (222, Fig. 15).

31. As to claim 27, Aharoni discloses at least the first application-aware resource controller is configured to selectively adapt a flow rate to associated with the content information based on at least one identified first device user requirement (col. 7, lines 7-15; and col. 8, lines 8-17).

32. As to claim 28, Aharoni discloses at least the first application-aware resource controller is configured to controllably handle the content information per application-based signaling, and to operatively associate a priority with the at least one service class (col. 8, lines 8-23; and col. 9, lines 57-62).

33. As to claim 29, Aharoni discloses associating a priority with the at least one service class (col. 2, lines 29-31, 56-62; col. 7, line 67 to col. 8, line 1; and col. 9, lines 57-62).

34. As to claims 30 and 32, Aharoni discloses at least one processing agent operatively configured within the network environment and configured to selectively filter content information associated with different communication sessions based on identified bandwidth constraints and service classes, and implement packet-level fast transcoding and related signaling (col. 10, lines 33-48; and col. 11, lines 53-56).

35. Claim 1 is further rejected under 35 U.S.C. 102(e)/103(a) as being anticipated by /unpatentable over McCanne et al. (Receiver-driven Layered Multicast, ACM SIGCOMM'96, August 96), hereinafter "McCanne".

36. McCanne is cited by the applicant in the parent application.

37. As to claim 1, McCanne discloses the invention substantially as claimed including a method comprising compressing video objects (page 1, right col., last parag.); generating at least one corresponding elementary stream comprising the compressed video objects (page 1, right col., last parag.); classifying information within each elementary stream based on importance and responsive to the compressed video objects (inherent in Page 3, left col., 2<sup>nd</sup> parag.); and assembling the classified information into packets associated with different classes of network packets (inherent in Page 3, left col., 2<sup>nd</sup> parag.) that belong to a single session (page 2, right parag., last two parags.).

38. McCanne's disclosure talks about real-time, multimedia applications and receiving higher rate, higher quality video (page 1, right col., 2<sup>nd</sup> parag.). It is well known in the art that multimedia standards are object-based (e.g. "MPEG4 Video Verification Model" reference is cited by the applicant in the parent application 09/464,671). This basically means that McCanne's data are video objects.

39. Claims 12 and 14 are further rejected under 35 U.S.C. 103(a) as being unpatentable over McCanne in view of Borella et al. (US 6,587,433), hereinafter "Borella".

40. As to claim 12, the claim is rejected for the same reasons as claim 1 above. In addition, a computer-readable media comprising computer instructions for performing acts comprising generating prioritization information based at least in part on at least one parameter associated with an application streaming media information is inherent in McCanne's disclosure. Moreover, McCanne discloses selectively discarding a portion of the packets of the media information in



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accordance with an adaptive rate control mechanism at a sending computing device ( page 3, left col. 2<sup>nd</sup>. Parag.).

41. McCanne does not disclose associating packets of the media information with a service class selected from a plurality of different service classes based on the prioritization information; and selectively outputting some of the packets of media information based on their respective service class priority levels. Providing service classes to packets of media information is well known in the art. Applicant's specification (page 2, lines 14-20) discloses that differentiated services gives a class-based solution to support a relative QoS, wherein packets can be divided into different QoS classes and forwarded at different priorities. Being highly scalable and relatively simple, the differentiated services model may come to dominate the backbone of the next generation of the Internet. Borella, cited here as an example, discloses implementation of differential packet delivery service (col. 2, lines 20-65). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of MaCanne and Borella in order to support a relative QoS in McCanne's system that is highly scalable and relatively simple.

42. As to claim 14, the claim is rejected for the same reasons as claims 12 above. In addition, McCanne discloses an apparatus comprising: logic configured to process content information output by an application layer process and provide resulting processed content information to a network layer process ( page 1, right col., 4<sup>th</sup> parag), the logic implementing at least one protocol layer process configured to packetize the content information (inherent in page 3, left vol. 2<sup>nd</sup> parag.), a queuing layer process configured to prioritize the packetized content information in accordance with different priorities within a single secession (page 2, right

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parag., last two parags.). While, Borella discloses scheduling layer process configured to selectively provide the prioritized packetized content information to the network layer process based on at least one quality of service parameter (col. 2, lines 20-65).

43. Claim 14 is further rejected under 35 U.S.C. 102(e) as being anticipated by Zeineh (US 6,606,413).

44. Zeineh is cited by the examiner in a previous office action.

45. As to claim 14, Zeineh discloses the invention substantially as claimed including an apparatus comprising logic configured to process content information output by an application layer process and provide resulting processed content information to a network layer process ( col. 12, lines 24-35), the logic implementing at least one protocol layer process configured to packetize the content information (col. 12, lines 35-37 ), a queuing layer process configured to prioritize the packetized content information in accordance with different priorities within a single secession ( col. 12, lines 37-41); and scheduling layer process configured to selectively provide the prioritized packetized content information to the network layer process based on at least one quality of service parameter (col. 16, line 60 to col. 17, line 3).

46. Claims 6 ,19, and 25 are further rejected under 35 U.S.C. 102(e) as being anticipated by Gai et al. (US 6,651,101), herein after "Gai".

47. As to claim 6, Gai discloses the invention as claimed including a method comprising packetizing content information (col. 3, line 65 to col. 4, line 3) ; generating resource

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coordination information based at least in part on at least one prioritizing parameter associated with an application communicating the content information (col. 2, line 56- col. 3, line 32; and col. 4, line 36-37) and on one or more prioritizing parameters associated with a user interaction (col. 4, lines 10-18, 37-38); selectively associating each packet of content information with a service class selected from among at least two different service classes based on the resource coordination information ( col. 5, lines 25-30); selectively outputting at least one packet of content information based on a priority associated with the service class associated with the packet of content information and providing the at least one packet of content information to a network (col. 4, lines 56-65 ).

48. As to claim 19, the claim is rejected for the same reasons as claim 6 above. In addition, Gai discloses an apparatus comprising packetizer logic configured to receive encoded content information and output corresponding packets of content information (col. 3, line 65 to col. 4, line 3); collaborator logic operatively coupled to the packetizer logic and configured to receive at least one prioritizing parameter associated with at least one application, including an application communicating the content information (col. 2, line 56- col. 3, line 32; and col. 4, line 36-37) and one or more prioritizing parameters associated with a user interaction (col. 4, lines 10-18, 37-38) and output resource coordination information based at least in part on the at least one prioritizing parameter associated with the application (col.10, lines 8-10) ; priority mapping logic operatively coupled to the collaborator logic and configured to receive the packetized content information and the resource coordination information, and selectively associate each received packet of content information with a service class selected from among at least two different service classes based on the resource coordination information, and selectively output at least one packet of content information based on a priority associated with each service class (col. 5,

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lines 25-30) ; and forwarder logic operatively coupled to the priority mapping logic and configurable to provide the at least one packet of content information to a network (col. 4, lines 56-65).

49. As to claim 25, Gai discloses the invention as claimed including above a system comprising a network environment including a backbone network , and a first access network and a second access network , each being operatively coupled to the backbone network (col. 1, line 29 to col. 2, line 35; and Fig. 2); a plurality of host devices including a first host device operatively coupled to the first access network and a second host device operatively coupled to the second access network ( e.g. 222, Fig. 2); application-aware resource controllers (208, 210, Fig. 2 ) configured to selectively aggregate content information associated with a single communication session established between two hosts (col. 6, lines 42-57), and mapping the aggregated information to at least two service classes ( 216, Fig. 2; and ).

50. Applicant's arguments filed 8/9/2005 have been fully considered but they are not persuasive. Therefore, rejection of claims 1-32 is maintained.

51. In the remarks, applicants argued in substance that (1), Aharoni et al. appears to describe the skipping of frames that ultimately cause fewer packets to be created, but no packets are actually discarded; (2) Aharoni et al. does not appear to address the concept of a "session", hence, Aharoni et al. cannot describe multiple priorities within a single session; (3), Aharoni et al. does appear to address compression determination using statistics received from a video client but there is no user interaction described or suggested;

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52. Examiner respectfully traverses applicants' remarks.

53. As to point (1), Aharoni describes skipping packets at the sender (col. 12, lines 42-55). It would have been obvious to one skilled in the art at the time of the invention that discarding or skipping of packets amounts for the same functionality in the context of adaptive control which is clearly disclosed by Aharoni in col. 3, lines 46-60, col. 12, lines 42-55, and col. 17, lines 52-65.

54. As to claim (2), Aharoni discloses a queuing layer process configured to prioritize the packetized content information in accordance with different priorities within a single session (col. 9, lines 56-61).

55. As to point (3), Aharoni discloses prioritization resulting from user interaction feedback (col. 7, line 60 to col. 8, line 17; and col. 19, lines 15-21).

56. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ammar et al. (US 6,215,766)

57. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (571) 272-3963. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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January 4, 2006

A handwritten signature in black ink, appearing to read 'N. El-Hady', with a long vertical line extending downwards from the end of the signature.

Nabil El-Hady, Ph.D, M.B.A.  
Primary Patent Examiner  
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